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dosages 1–4 times daily. Depending on the amounts of xylitol added to the solution a 0.1 ml dose would therefore deliver anywhere from 10–60 mgs of xylitol. Accordingly, a 0.4 ml dose of the nasal spray would administer anywhere from 4–240 mgs of xylitol.

A composition of Example 1 consists of xylitol, which is the active ingredient in the medicament, a buffer system, (consisting of sodium citrate dihydrate, citric acid anhydrous, and hydrochloric acid or sodium hydroxide), as well as an antimicrobial preservative, benzalkonium chloride (50%), all dissolved in 100 mls of water. The composition of Example 1 is considered a bathing mist, as it has no thickening agents added to the solution to provide more viscosity to the composition. Additionally, the formulation of Example 1 is used to form three different medicament compositions. The compositions vary depending on the pH, as noted in the amount of HCl or NaOH added. Three different formulations are contemplated for example 1; one with a pH of 3.0, one with a pH of 5.0, and one with a pH of 7.0.

The following are additional examples of xylitol medicament compositions which may be formed according to the present invention. In all of the following examples, the concentration of xylitol is consistent, as are the buffer components, and the antimicrobial preservative component (benzoalkonium chloride (50%)) concentration. Accordingly, the preferred dosage and amount of xylitol administered nasally from the composition is consistent throughout the following examples. Additionally, all of the compositions in the following examples may be prepared at a pH of 3.0, 5.0, or 7.0.

Example 2

TABLE 2

COMPONENTS	AMOUNT (g/100 ml)
Xylitol	10–60
Sodium Citrate Dihydrate, U.S.P.	0.50
Citric Acid Anhydrous, U.S.P.	0.20
Glycerin (96%) U.S.P.	2.0
Benzalkonium Chloride (50%), NF	0.04
HCl or NaOH	Variable to adjust pH to 3.0, 5.0, and 7.0
Purified Water, U.S.P. q.s.	100 ml

The composition of example 2 contains the additional component of glycerin. Glycerin serves as a humectant in the composition.

Example 3

TABLE 3

COMPONENTS	AMOUNT (g/100 ml)
Xylitol	10–60
Sodium Citrate Dihydrate, U.S.P.	0.50
Citric Acid Anhydrous, U.S.P.	0.20
Hydroxy Propyl Cellulose, N.F.	2.0
Benzalkonium Chloride (50%), NF	0.04
HCl or NaOH	Variable to adjust pH to 3.0, 5.0, and 7.0
Purified Water, U.S.P. q.s.	100 ml

The composition of Example 3 additionally includes hydroxy propyl cellulose. Hydroxy propyl cellulose serves as a humectant, as well as a thickening agent to provide a more viscous composition. The compositions of Example 3

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are consequently more viscous than the compositions of Examples 1 and 2. The compositions of Example 3 are gels which would provide greater adhesion in the intranasal area and within the delivery method of the present invention.

Example 4

TABLE 4

COMPONENTS	AMOUNT (g/100 ml)
Xylitol	10–60
Sodium Citrate Dihydrate, U.S.P.	0.50
Citric Acid Anhydrous, U.S.P.	0.20
Glycerin 96%, U.S.P.	10
Hydroxy Propyl Cellulose, N.F.	2.0
Benzalkonium Chloride (50%), NF	0.04
HCl or NaOH	Variable to adjust pH to 3.0, 5.0, and 7.0
Purified Water, U.S.P. q.s.	100 ml

Example 5

TABLE 5

COMPONENTS	AMOUNT (g/100 ml)
Xylitol	10–60
Sodium Citrate Dihydrate, U.S.P.	0.50
Citric Acid Anhydrous, U.S.P.	0.20
Methylcellulose, U.S.P.	2.0
Benzalkonium Chloride (50%), NF	0.04
HCl or NaOH	Variable to adjust pH to 3.0, 5.0, and 7.0
Purified Water, U.S.P. q.s.	100 ml

Similar to the compositions of Example 3, methylcellulose acts as a surfactant, as well as thickening agent in the compositions of Example 5. The compositions of Example 5 are also similarly gels with adhesive properties.

Example 6

TABLE 6

COMPONENTS	AMOUNT (g/100 ml)
Xylitol	10–60
Sodium Citrate Dihydrate, U.S.P.	0.50
Citric Acid Anhydrous, U.S.P.	0.20
Glycerin 96%, U.S.P.	10
Methylcellulose, U.S.P.	2.0
Benzalkonium Chloride (50%), NF	0.04
HCl or NaOH	Variable to adjust pH to 3.0, 5.0, and 7.0
Purified Water, U.S.P. q.s.	100 ml

While there have been described what are presently believed to be the preferred embodiments of the invention, those skilled in the art will realize that changes and modifications may be made thereto without departing from the spirit of the invention, and it is intended to include all such changes and modifications as fall within the true scope of the invention.

What is claimed is:

1. A pharmaceutical composition for preventing and/or treating upper respiratory infections in a mammal comprising an active agent consisting essentially of xylitol in combination with a pharmaceutically acceptable carrier suitable for intranasal delivery.

2. A pharmaceutical composition according to claim 1 wherein said carrier includes a component selected from the